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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,957	12/30/2003	Ingo Zenz	6570P018	8586

45062 7590 06/07/2007		EXAMINER
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ART UNIT	PAPER NUMBER
2165	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/749,957	ZENZ, INGO
	Examiner	Art Unit	
	Thuy N. Pardo	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Applicant's Amendment filed on March 12, 2007 in response to Examiner's Office

Action has been reviewed. Claims 1-27 are pending in the application. This Office Action is

Final.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed ·
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-6, 10, 11, 17-22, 24 and 25 are rejected under 35 U.S.C. 102(e) as being

anticipated by E et al. (Hereinafter "E"), US Patent Application Publication No. 2004/0019639.

As to claim 1, E teaches the invention substantially as claimed, comprising:

storing a configuration for a distributed environment in a central storage of the distributed

environment [storing updates of distributed data in distributed store 110 of fig. 2; 0035]; and

updating a portion of the configuration in the distributed environment [update the primary

data portion, 0060-0062; 0071; 0077; 0103].

As to claim 2, E teaches the invention substantially as claimed. E further teaches:

acquiring a lock for the portion of the configuration in a first node in the distributed

environment [locks to multi-threaded processes for portions of the distributed data, ab; lock 114

to primary data portion 210, see fig. 3A-3C of process 106 in the node 150 of fig. 2; 0018-0021;

0036-0051];

modifying the portion of the configuration [modified portion of local data; 0060; 0062;

0071; 0103];

invalidating a representation of the portion of the configuration in the distributed

environment [providing locked access to distributed data in a distributed system, 0073; other

processes may be prevented from accessing the locked portion, 0042; 500-530 of fig. 6]; and

releasing the lock [releases the lock to the distributed store, 530 of fig. 6; ab; 0051].

As to claim 3, E teaches the invention substantially as claimed. E further teaches:

updating a database to reflect modifications of a portion of the configuration [update

primary data portion, see fig. 3C, 5B; 0060-0062; 0071; 0077; 0103]; and

blocking reads of the configuration during the updating [other processes may be

prevented from accessing the locked portion, 0042].

As to claim 4, E teaches the invention substantially as claimed. E further teaches

notifying nodes in the distributed environment of the updated configuration data [notify the local

data manager, 0048-0052].

As to claim 5, E teaches the invention substantially as claimed. E further teaches that the

lock is cluster wide [locks to processes for portions of primary data while a process holds a lock

for a portion of primary data, other processes may not access the locked portion, 0011].

As to claim 6, E teaches the invention substantially as claimed. E further teaches writing

changes to a shared database [update primary data 112 in distributed store 110 of fig. 3C].

As to claim 10, E teaches the invention substantially as claimed. E further notifying

registered listeners that the configuration has been changed [a thread requiring access to the

distributed data portion may notify the local data manager. The local data manager may

increment the count in response to the notification. If a thread finishes accessing the distributed

data portion, the thread may notify the local data manager that it has finished. The local data

manager may decrement the count in response to the notification that the thread has finished,

0048-0049].

As to claims 11, 17 and 25, these claims are corresponding apparatus claims of claim1-6

and 10; therefore, they are rejected under the same rationale. E further teaches an instance of a

configuration manager [0011; 0034; 0040-0045].

As to claims 18-22 and 24, all limitations of these claims have been addressed in the

analysis 1-6, 10, 11 above, and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 7, 8, 12-14, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable

over E et al. (Hereinafter "E"), US Patent Application Publication No. 2004/0019639 in view of

Vahalia et al. (Hereinafter "Vahalia") US Patent Application Publication No. 2005/0251500.

As to claim 7, E teaches the invention substantially as claimed, with the exception of

changing a configuration object in a branch of a tree structure although it has the same

functionality of obtaining a lock on a portion of an application in a distributed environment.

Vahalia teaches changing a configuration object in a branch of a tree structure [see 161-168 of

fig. 9; 162-185 of fig. 10; fig. 13-15, 22; 0105; 0111; 0167-0168].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art

at the time of the invention to add Vahalia's features to the system of E as an essential means to

recognize the location of updated objects in the tree structure to exclusively access to that

specified updated object in the file system.

As to claim 8, E and Vahalia teach the invention substantially as claimed. E further teaches distributed sessions may be distributed among multiple servers, for example in a cluster [0008; 0035], and Vahalia further teaches sending a cache invalidation event to another node in the cluster [0167; 0127-0133].

As to claim 12, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a configuration cache [330, 323, 324 of fig. 18] and a configuration handler [0123-0125].

As to claim 13, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a persistency handler [0123-0125].

As to claim 14, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a configuration handler to permit access to and modification of the configuration [0123-0125].

As to claim 23, this limitation has been addressed in the analysis of claim 8 above, and this claim is rejected on that basis.

As to claim 27, this limitation has been addressed in the analysis of claims 12-14 and 23 above, and this claim is rejected on that basis.

4.   Claims 9, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over E et

al. (Hereinafter "E"), US Patent Application Publication No. 2004/0019639 in view of

Applicant's Admission of Prior art.

        As to claim 9, E teaches the invention substantially as claimed, with the exception of a

plurality of Java 2 Enterprise Edition (J2EE) although it has the same functionality of using user-

specific states including persistent objects that handle to Enterprise Java Bean [see 0008].

However, the Applicant's Admission of Prior art teaches that in a J2EE environment, the

business layer, which handles the core business logic of the application, is comprised of

Enterprise Java Bean (EJB") components with support for EJB containers [0007]. It would have

been obvious to one of ordinary skill in the Data Processing art at the time of the invention to

add this feature to the system of E as an essential means to develop portable, robust, scalable and

secure server-side Java applications by building on the solid foundation of Java SE, Java EE

provides web services, component model, management, and communications APIs that make it

the industry standard for implementing enterprise class service-oriented architecture (SOA) and

Web 2.0 applications.

        As to claims 15 and 26, all limitations of these claims have been addressed in the analysis

above, and these claims are rejected on that basis.

5.   Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over E et al.

(Hereinafter "E"), US Patent Application Publication No. 2004/0019639, in view of Vahalia et

al. (Hereinafter "Vahalia") US Patent Application Publication No. 2005/0251500, and in further

view of Applicant's Admission of Prior art.

As to claim 16, E, Vahalia and Applicant's Admission of Prior art teach the invention

substantially as claimed. E further teaches that some of the persistent objects [0034], and Vahalia

further teaches caching client attribute data and file attribute data [0066; 0131].

Response to Arguments

6.   35 U.S.C. 112, 2nd paragraph:

Applicant argues that the definition of "configuration" was defined at page 8 of the

specification wherein "A configuration is a set of persistent objects referred to herein as

configuration objects" are persuasive, therefore, the 112, 2nd rejection has been withdrawn. It

should be noted that a configuration is not only a set of persistent objects, it is also an

information (the configuration is a configuration of information, see the abstract), data and/or

program code (see 0009, 0027-0028 of specification), messages (0023), or a tree structure, a set

of name value pairs, set of files and/or a set of sub-configuration objects (0030 of specification).

35 U.S.C. 102(e):

Applicant argues that E fails to teach storing a configuration for a distributed

environment in a central storage or updating the configuration in the distributed environment.

Examiner respectfully disagrees. Examiner believes that E teaches these features. E

teaches storing a configuration for a distributed environment in a central storage of the

distributed environment [storing updates of distributed data in distributed store 110 of fig. 2;

0035]; and updating a portion of the configuration in the distributed environment [update the

primary data portion, ab; 0060-0062; 0071; 0077; 0103]. As I mentioned previously,

configuration is not only a set of persistent objects, it is also an information (the configuration is

a configuration of information, see the abstract), data and/or program code (see 0009, 0027-0028

of specification), messages (0023), or a tree structure, a set of name value pairs, set of files

and/or a set of sub-configuration objects (0030 of specification). In this case, E teaches updating

and storing a configuration of data in a central storage (i.e., distributed store 110 of fig. 2; 0034;

the abstract].

     Applicant argues that E fails to teach the additional invalidating element of claim 2.

     Examiner respectfully disagrees. Examiner believes that E teaches invalidating a

representation of the portion of the configuration in the distributed environment by providing

locked access to distributed data in a distributed system, 0073 and preventing other processes

from accessing the locked portion, 0042; 500-530 of fig. 6].

     Applicant argues that E fails to teach the blocking element.

     Examiner respectfully disagrees. Examiner believes that E teaches this feature of

blocking reads of the configuration during the updating by preventing other processes from

accessing the locked portion, 0042].

     Applicant argues that E fails to teach notifying nodes in the distributed environment of

the updated configuration data. Examiner respectfully disagrees. Examiner believes that E

teaches notifying nodes in the distributed environment of the updated configuration data [notify

the local data manager from the distributed store (i.e., central storage) that the tread has finished,

see 0048-0052].

Applicant argues that E fails to teach an instance of a configuration manager, the maintenance of consistent storage of a configuration across the nodes without passing configuration modification between nodes, and a change event listener to notify by registered components of configuration change events can be found.

As to this point, Examiner respectfully disagrees. Examiner also believes that E teaches these features. E teaches an instance of a configuration manager (i.e., application servers) globally access one or more instances or copies of data, [see 0034; 0040-0045], a consistent storage of a configuration across the nodes [(i.e., distributed data systems) 110 of fig. 1] without passing configuration modification between nodes [updates of distributed data to distributed store 110 in distributed data systems in which access to data is shared by multiple nodes or processes, 0032; 0035; 0053], and a change event listener to notify by registered components of configuration change events by sending updates by the application servers (i.e., change event listener) of distributed data to distributed store 110 in response to an event such as a modification of one or more attributes of the local data 108 and/or as routine maintenance to synchronize the primary data with the local data 108 [0035].

Claims rejection under 35 U.S.C. 103:

Applicant argues that In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21

USPQ2d 1941 (Fed. Cir. 1992). In this case, E teaches the invention substantially as claimed,

with the exception of changing a configuration object in a branch of a tree structure although it

has the same functionality of obtaining a lock on a portion of an application in a distributed

environment. Vahalia teaches changing a configuration object in a branch of a tree structure [see

161-168 of fig. 9; 162-185 of fig. 10; fig. 13-15, 22; 0105; 0111; 0167-0168]. Therefore, it

would have been obvious to one of ordinary skill in the Data Processing art at the time of the

invention to add Vahalia's features to the system of E as an essential means to recognize the

location of updated objects in the tree structure to exclusively access to that specified updated

object in the file system. E teaches the invention substantially as claimed, with the exception of

a plurality of Java 2 Enterprise Edition (J2EE) although it has the same functionality of using

user-specific states including persistent objects that handle to Enterprise Java Bean [see 0008].

However, the Applicant's Admission of Prior art teaches that in a J2EE environment, the

business layer, which handles the core business logic of the application, is comprised of

Enterprise Java Bean (EJB") components with support for EJB containers [0007]. It would have

been obvious to one of ordinary skill in the Data Processing art at the time of the invention to

add this feature to the system of E as an essential means to develop portable, robust, scalable and

secure server-side Java applications by building on the solid foundation of Java SE, Java EE

provides web services, component model, management, and communications APIs that make it

the industry standard for implementing enterprise class service-oriented architecture (SOA) and

Web 2.0 applications.

7.   Applicant's arguments filed on March 12, 2007 have been fully considered but they are

not persuasive.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The

examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 05, 2007

THUY N. PARDO
PRIMARY EXAMINER